

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. Of: MELLER ET AL

Serial No.: 10/801,095

Filed: March 15, 2004

For: SEALING RING AND SEALING RING ARRANGEMENT

Customer No. 32047

Confirmation No. 9266

Docket: LIP039

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450REQUEST FOR REFUND

Dear Sir:

This is a request for a refund with respect to the charge of \$1225.00 (\$1080.00 for claims over 20 and \$145.00 for multiple dependent claims) to Deposit Account No. 50-2121 on April 5, 2006 for the above-identified application.

On June 1, 2004, the U.S. Patent Office issued a Notice to File Missing Parts of Non-Provisional Application, along with a request for payment of \$580.00 (\$385.00 for Statutory basic filing fee; \$65.00 late Declaration surcharge; and \$130.00 for English translation surcharge). The Patent Office did not originally request \$36.00 for four (4) claims over 20. A copy of the Notice to File Missing Parts of Non-Provisional Application dated June 1, 2004 is enclosed.

On August 2, 2004, Applicant responded to the Notice to File Missing Parts. Along with the response, Applicant filed a Preliminary Amendment and paid via Credit Card \$616.00, which has a breakdown of \$385.00 for a small entity Statutory basic filing fee; \$36.00 for four (4) claims over 20; \$65.00 for a late Declaration surcharge; and \$130.00 for processing an application filed with a non-

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Adjustment date: 08/21/2006 ZJUHARL
04/05/2006 Y612AN 00000006 502121 10801095
01 FC:2202 1080.00 CR
02 FC:2203 145.00 CR

US Appln. Serial No.: 10/801,095
Request for Refund filed July 26, 2006
Page 2 of 2

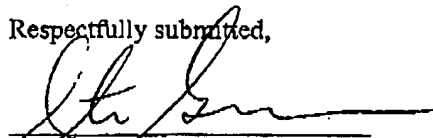
English language specification. A copy of the Response to Notice to File Missing Parts filed August 2, 2004 is enclosed, along with a copy of the Credit Card Payment Form in the amount of \$616.00.

On April 5, 2006, the Patent Office charged Deposit Account No. 50-2121 in the amount of \$1080.00 for claims over 20. This charge is an error of the Patent Office. There are currently 24 claims in the application, and Applicant paid \$36.00 for four (4) claims over 20 along with the Response to Notice to File Missing Parts filed on August 2, 2004. A copy of the April 2006 Deposit Account Statement is enclosed.

On April 5, 2006, the Patent Office also charged Deposit Account No. 50-2121 in the amount of \$145.00 for multiple dependent claims. This charge is an error of the Patent Office. There are currently no multiple claims in the application due to the Preliminary Amendment filed on August 2, 2004.

Please credit Deposit Account No. 50-2121 in the amount of \$1080.00 and \$145.00, totaling \$1225.00.

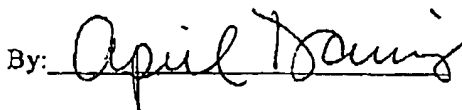
Respectfully submitted,



Steven J. Grossman
Attorney for Applicant
Reg. No. 35,001
Grossman, Tucker, Perreault & Pfleger, PLLC
55 South Commercial Street
Manchester, New Hampshire 03101

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By: 

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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/801,095	03/15/2004	Dieter Meller	LIP039

32047

GROSSMAN, TUCKER, PERREALT & PFLEGER, PLLC
 55 SOUTH COMMERCIAL STREET
 MANCHESTER, NH 03101

CONFIRMATION NO. 9266

FORMALITIES LETTER

0000000012833172

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Date Mailed: 06/01/2004

GROSSMAN, TUCKER,
 PERREAU & PFLEGER, PLLC

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
Applicant must submit \$ 385 to complete the basic filing fee for a small entity.
- The oath or declaration is missing.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- The application was filed in a language other than English. Applicant is required to provide an English translation of the specification and a statement that the translation is accurate. (See 37 CFR 1.52(d)).
- Applicant must file an English translation of the application, the \$ 130 fee set forth in 37 CFR 1.17(l), unless previously submitted, and a statement that the translation is accurate (37 CFR 1.52(d)).
- Because your specification was filed in a language other than English, the Office was unable to determine the number of claims submitted. Additional claim fees may be due once the number of claims can be determined.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$580 for a Small Entity

- \$385 Statutory basic filing fee.
- \$65 Late oath or declaration Surcharge.
- \$130 for English translation surcharge required.

07/28/2006 14:29 FAX

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Page 2 of 2

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Alexandria VA 22313-1450

A copy of this notice MUST be returned with the reply.

I. II
Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

**Response To Notice To File Missing Parts Of Application
Filing Date Granted (PTO-1533)(Small Entity)**

Docket No.
LIP 039

In Re Application Of: MELLER ET AL

COPY

Serial No.
10/801,095

Filing Date
MARCH 15, 2004

Examiner

Group Art Unit

Invention: SEALING RING AND SEALING RING ARRANGEMENT

Mail Stop Missing Parts

TO THE COMMISSIONER FOR PATENTS:

This is a response to the Notice to File Missing Parts of Application - Filing Date Granted (PTO-1533) mailed on
JUNE 1, 2004
Date

Enclosed herewith for filing are the following:

- ☒ A copy of the Notice to File Missing Parts of Application - Filing Date Granted (PTO-1533). (REQUIRED)
- ☒ An oath or declaration in compliance with 37 CFR 1.63, including residence information and identifying the application by the above Application Number and Filing Date.
- ☐ A properly signed oath or declaration in compliance with 37 CFR 1.63.
- ☐ An oath or declaration in compliance with 37 CFR 1.63 listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Filing Date.
- ☒ A verified English translation of the non-English language application papers as originally filed. It is requested that this translation be used as the copy for examination purposes in the United States Patent and Trademark Office.
- ☐ _____ verified small entity declaration(s)
 - ☐ is/are attached.
 - ☐ was/were filed on _____
- ☐ A separate request for refund.
- ☒ Other (list):

Certified Priority Document DE 103 11 155.7

Preliminary Amendment (8 pgs)

Response To Notice To File Missing Parts Of Application Filing Date Granted (PTO-1533)(Small Entity)			Docket No. LIP 039
In Re Application Of: MELLER ET AL			
Serial No. 10/801,095	Filing Date MARCH 15, 2004	Examiner	Group Art Unit
Invention: SEALING RING AND SEALING RING ARRANGEMENT			
<u>TO THE COMMISSIONER FOR PATENTS:</u> <u>Mail Stop Missing Parts</u>			
<input checked="" type="checkbox"/> Completion of application fees as calculated below:			
<input checked="" type="checkbox"/> Utility application filing fee			<u>\$385.00</u>
<input type="checkbox"/> Design application filing fee			<u> </u>
<input checked="" type="checkbox"/> Total number of independent claims = <u>1</u>			<u> </u>
<input checked="" type="checkbox"/> Total number of claims = <u>24</u>			<u>\$36.00</u>
<input type="checkbox"/> Multiple dependent claims			<u> </u>
<input checked="" type="checkbox"/> Surcharge for late payment of filing fee and/or late filing of original declaration or oath			<u>\$65.00</u>
<input type="checkbox"/> Petition and fee for filing by other than all the inventors or a person not the inventor			<u> </u>
<input checked="" type="checkbox"/> Fee for processing an application filed with a non-English language specification			<u>\$130.00</u>
<input type="checkbox"/> Fee for processing and retention of application			<u> </u>
Total completion of application fees			<u>\$616.00</u>
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a response to the above-identified Notice to File Missing Parts of Application. The requested extension is as follows (check time period desired). If an additional time extension is required, please consider this a petition therefor.			
<input type="checkbox"/> One month <input type="checkbox"/> Two months <input type="checkbox"/> Three months <input type="checkbox"/> Four months <input type="checkbox"/> Five months			
from: <u> </u> Date		until: <u> </u> Date	
Total time extension fees			<u> </u>
Total fees due			<u>\$616.00</u>

Response To Notice To File Missing Parts Of Application
Filing Date Granted (PTO-1533) (Small Entity)Docket No.
LIP 039In Re Application Of: **MÖLLER ET AL**Serial No.
10/801,095Filing Date
MARCH 15, 2004

Examiner

Group Art Unit

Invention: **SEALING RING AND SEALING RING ARRANGEMENT****TO THE COMMISSIONER FOR PATENTS:****Mail Stop Missing Parts**

The fee of \$616.00 is to be paid as follows:

- ☒ ~~A check~~ ^{Credit Card Form} in the amount of the fee is enclosed.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 50-2121
- ☒ If an additional extension of time is required, please consider this a petition therefor and charge any additional fees which may be required to Deposit Account No. 50-2121

Dated: August 2, 2004

Signature

Steven J. Grossman
Reg. No. 35,001
GrossmanTucker Perreault & Pflieger, PLLC
55 South Commercial St.
Manchester, NH 03101
Customer No. 32047

I certify that this document and fee is being deposited
August 2, 2004 with the U.S. Postal Service as
first class mail under 37 C.F.R. 1.8 and is addressed to the
Commissioner for Patents, P.O. Box 1450, Alexandria, VA
22313-1450.

Signature of Person Mailing Correspondence

April Davis



**United States
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Trademark Office**

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Deposit Account Statement

Requested Statement Month: April 2006
 Deposit Account Number: 502121
 Name: GROSSMAN TUCKER PERREAULT PFLEGER, PLLC
 Attention: TERESA C TUCKER
 Address: 65 SOUTH COMMERCIAL STREET
 City: MANCHESTER
 State: NH
 Zip: 03101
 Country: UNITED STATES

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
04/04	210	11394725	P23287	1202	\$50.00	\$1,711.00
04/05	10	10801095	LIP039	2202	\$1,080.00	\$631.00
04/05	11	10801095	LIP039	2203	\$145.00	\$486.00
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04/28	249	SERVICE CHARGE		9202	\$25.00	\$11.00
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. Of: MELLER ET AL

Serial No.: 10/801,095

Filed: March 15, 2004

For: SEALING RING AND SEALING RING ARRANGEMENT

DOCKET: LIP039

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Dear Sir:

Applicant hereby requests that the following amendments be made to the above identified application prior to the examination thereof by the Examiner, and prior to the calculation of fees.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) Sealing ring for sealing two components moving relative to each other, particularly as a rotary shaft seal or piston ring, with a radially internal or external sealing surface that can be brought into contact with one of the components to form a seal against a fluid medium, where, to the side of the sealing surface, the sealing ring displays a pressurizing surface to be pressurized by the fluid medium and, on the opposite side, a supporting surface to the side of the sealing surface for positioning against a groove flank of a component accommodating the sealing ring, characterized in that the pressurizing surface or the supporting surface, or the pressurizing surface and the supporting surface, are inclined relative to the sealing surface and enclose an angle of less than 90° towards it, and in that the sealing ring is capable of radial compression towards a radially internal sealing surface, or of expansion towards a radially external sealing surface.
2. (Original) Sealing ring according to Claim 1, characterized in that the pressurizing surface or the supporting surface, or the pressurizing surface and the supporting surface, each form a lateral surface of a truncated cone.
3. (Original) Sealing ring according to Claim 2, characterized in that the areas of the lateral surface of a truncated cone of the pressurizing surface or the supporting surface, or of the pressurizing surface and the supporting surface, each enclose an angle of 30° to 60° with the sealing surface towards said sealing surface.

4. (Original) Sealing ring according to Claim 2, characterized in that the area of the pressurizing surface or the supporting surface, or of the pressurizing surface and the supporting surface, with the form of a truncated cone follows on laterally, at least almost directly, from the sealing surface.
5. (Original) Sealing ring according to Claim 1, characterized in that a surface is located between the pressurizing surface and the supporting surface, opposite to the sealing surface, which is a lateral surface of a truncated cone, or a surface of a cylinder, or a concavely arched surface forming a transitional area.
6. (Original) Sealing ring according to Claim 1, characterized in that the radial thickness of the sealing ring is less than/equal to the extension of the sealing surface in the axial direction of the sealing ring.
7. (Original) Sealing ring according to Claim 1, characterized in that the pressurizing surface or the supporting surface, or the pressurizing surface and the supporting surface, is or are profiled.
8. (Original) Sealing ring according to Claim 1, characterized in that the sealing ring is divided almost completely or throughout in the radial direction at one point on its circumference, forming a weaker area.
9. (Original) Sealing ring according to Claim 8, characterized in that the weaker area is designed as a complete division of the sealing ring, forming two opposite sealing ring ends, in

that at least one, integrally molded area extending in the circumferential direction of the sealing ring is provided on each of the sealing ring ends, and in that the areas associated with different sealing ring ends are located one behind the other in the axial direction of the sealing ring, forming a labyrinth seal, and are in contact with each other, at least in operating condition of the sealing ring.

10. (Original) Sealing ring according to Claim 1, characterized in that the sealing ring consists of a plastic with an elongation at break at room temperature of $\leq 50\%$.

11. (Original) Sealing ring according to Claim 1, characterized in that the sealing surface is designed as the surface of a cylinder.

12. (Original) Sealing ring according to Claim 1, characterized in that the sealing ring is accommodated in a component in a groove without undercut, in that the groove displays a supporting flank opposite the supporting surface of the sealing ring and a pressure-side flank opposite the pressurizing surface of the sealing ring, in that the sealing surface of the sealing ring projects from the receiving component in the radial direction, in that the pressure-side flank or the supporting flank, or the pressure-side flank and the supporting flank, of the groove is or are inclined relative to the sealing surface of the sealing ring, each enclosing an angle of less than 90° towards it, and in that a gap is provided, at least between the pressurizing surface of the sealing ring and the pressure-side flank, into which a fluid medium to be provided on the pressure side of the sealing ring can flow, pressing the sealing ring in sealing fashion against the supporting flank of the groove and against a component to be sealed that corresponds to the first component, and, by application of pressure by the fluid medium, the supporting surface of the

sealing ring can be brought into flat contact with the supporting flank of the groove, at least on the side facing the sealing surface.

13. (Currently Amended) Sealing arrangement with a sealing ring according to one of Claim[s] 1 to 11, and with a component which displays a groove without undercut to accommodate the sealing ring, where the groove displays a supporting flank opposite the supporting surface of the sealing ring, and a pressure-side flank opposite the pressurizing surface of the sealing ring, where the sealing surface of the sealing ring projects from the receiving component in the radial direction, characterized in that the pressure-side flank or the supporting flank, or the pressure-side flank and the supporting flank, of the groove is or are inclined relative to the sealing surface of the sealing ring, each enclosing an angle of less than 90° towards it, and in that a gap is provided, at least between the pressurizing surface of the sealing ring and the pressure-side flank, into which a fluid medium to be provided on the pressure side of the sealing ring can flow, pressing the sealing ring in sealing fashion against the supporting flank of the groove and against a component to be sealed that corresponds to the first component, and, by application of pressure by the fluid medium, the supporting surface of the sealing ring can be brought into flat contact with the supporting flank of the groove, at least on the side facing the sealing surface, where at least the area of the sealing surface facing the supporting surface is arranged at least essentially parallel, or exactly parallel, to the longitudinal axis of the sealing ring.

14. (Original) Sealing arrangement according to Claim 13, characterized in that the gap extends at least partially over the side of the sealing ring opposite the sealing surface of the sealing ring, which forms a transitional area between the supporting surface and the pressurizing surface (8).

15. (Original) Sealing arrangement according to Claim 13, characterized in that the sealing ring projects from the groove (5) in the component in the radial direction by less than one-third of its radial thickness.

16. (Original) Sealing arrangement according to Claim 13, characterized in that the supporting flank of the groove can be brought into full contact with the supporting surface of the sealing ring by pressurizing the fluid medium.

17. (Original) Sealing arrangement according to Claim 13, characterized in that the gap displays an essentially constant gap width over its radial extension.

18. (Original) Sealing arrangement according to Claim 13, characterized in that the groove is of rounded design in the area of the groove base, or in at least one transitional area to an adjacent groove flank.

19. (Original) Sealing arrangement according to Claim 13, characterized in that a first component is provided, which displays the sealing ring accommodated in a circumferential groove, and in that a second component is provided, which is capable of motion relative to the first component and with which the sealing surface of the sealing ring can be brought into contact in sealing fashion during motion of the components relative to each other, and in that the sealing ring is located in the groove without pretension in relation to the component to be sealed.

20. (Original) Sealing arrangement according to Claim 13, characterized in that the component accommodating the sealing ring in a groove is a shaft, and in that a shaft guide is provided, with which the sealing surface of the sealing ring can be brought into contact in sealing fashion by application of the pressure of the fluid medium during rotary motion of the shaft and the shaft guide relative to each other, in that the shaft guide is made of a light metal, and in that the supporting surface of the sealing ring is inclined to the longitudinal axis of the sealing ring such that, owing to the pressure force of the fluid medium on the sealing ring, the sealing ring is located in non-rotating fashion relative to the shaft guide.

21. (Original) Sealing arrangement according to Claim 13, characterized in that the component accommodating the sealing ring is a shaft guide, and in that a shaft capable of rotation relative to it is provided, with which the sealing surface of the sealing ring can be brought into contact in sealing fashion.

22. (Original) Sealing arrangement according to Claim 13, characterized in that the shaft and the shaft guide are components of an automatic transmission, and in that the sealing ring is provided for sealing at least one oil passage.

23. (Original) Sealing arrangement according to Claim 13, characterized in that the sealing ring is located in a groove of a piston of a piston engine, and in that the sealing ring provides a seal against a cylinder guiding the piston.

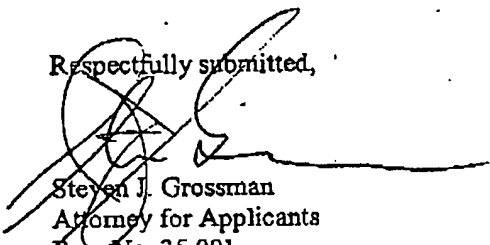
24. (Original) Sealing arrangement according to Claim 23, characterized in that the piston is a piston of a combustion engine, or of a steam engine, or of a reciprocating pump.

REMARKS/ARGUMENTS

Applicant respectfully requests that the foregoing amendments be entered before the examination of the present application, and before calculation of fees.

In the event the Examiner deems personal contact is necessary, please contact the undersigned attorney at (603) 668-6560.

Respectfully submitted,


Steven J. Grossman
Attorney for Applicants
Reg. No. 35,001

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, PO Box 1450 Alexandria, VA 22313-1450 on August 2, 2004, at Manchester, New Hampshire.

By 



GROSSMAN, TUCKER
PERREAULT & PFLEGER, PLLC

Writer's direct email:
jhobbs@gtp.com

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